

PRODUCT IDENTIFICATION



Product Name: Isopropyl Alcohol 50% USP Grade

CAS Number: 67-63-0

Molecular Formula: C₃H₈O

Molecular Weight: 60.10 g/mol

Grade: USP Grade

Purity / Concentration: 50%

Synonyms: Not Available

PRODUCT OVERVIEW

Isopropyl Alcohol 50% USP Grade is a high-quality, clear aqueous solution designed for consistent performance in laboratory and industrial environments. This 50% concentration provides a reliable solvent and cleaning agent that meets strict quality standards. It is an essential chemical for applications requiring a precise balance of alcohol and water for effective surface treatment.

Grade Significance: USP Grade signifies that the product meets the rigorous quality and purity standards established by the United States Pharmacopeia. This provides the end user with confidence that the material is consistent and free from harmful impurities.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

Certificate of Analysis data not available for this product.

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Clear, colorless liquid with mild alcohol odor	Form	Liquid
Boiling Point	82°C (180°F)	Melting / Freezing Point	-89°C (-128°F)
Flash Point	≥ 18.3 °C (65 °F), closed cup — bounded by the 70 % solution; an aqueous solution flashes higher as it is diluted. Class 3, PG II	Specific Gravity	0.91
Solubility	Fully miscible with water	Molecular Formula	C ₃ H ₈ O
Molecular Weight	60.10 g/mol		

APPLICATIONS

1. **Laboratory Research** — Used as a mild cleaning agent for glassware and laboratory equipment. It effectively removes residues without leaving streaks or contaminants.
2. **Manufacturing** — Functions as an industrial solvent for cleaning precision parts and electronic components. Its controlled concentration ensures compatibility with sensitive materials.
3. **Healthcare Support** — Utilized in facility maintenance for surface disinfection tasks. It provides a reliable solution for sanitizing non-porous surfaces in clinical settings.
4. **Cosmetic Production** — Acts as a carrier solvent or ingredient in various personal care formulations. The USP grade ensures it meets the purity requirements necessary for sensitive applications.
5. **Printing and Graphics** — Applied as a cleaning solvent for rollers and printing plates. It helps maintain equipment efficiency by dissolving ink residues effectively.

STORAGE & HANDLING

Because this product is a highly flammable liquid, it must be stored in a cool, well-ventilated area away from heat, sparks, or open flames. Proper containment is critical to prevent the accumulation of vapors, which can cause drowsiness or dizziness and pose a significant fire hazard.

AVAILABLE PACKAGING

- 1 Quart
- 1 Gallon
- 5 Gallon
- 15 Gallon
- 55 Gallon
- 275 Gallon
- 330 Gallon

SAFETY SUMMARY (CROSS-REFERENCE TO SDS)

Signal Word: **Danger**



Hazard Statements:

- H225: Highly flammable liquid and vapour
- H319: Causes serious eye irritation
- H336: May cause drowsiness or dizziness

Emergency Contact: CHEMTEL - 800-255-3924 (24 Hours/Day, 7 Days/Week)

For complete safety information, refer to the Safety Data Sheet (SDS) for this product.

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